ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/732436

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____Invalid Line Length — The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4____Non-ASCII — The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5____Variable Length — Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7____Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213> Response — Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11____Use of <220> — Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____Misuse of n — n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH – Biotechnology Systems Branch – 08/21/2001

OIPE

RAW SEQUENCE LISTING   DATE: 09/13/2001
PATENT APPLICATION: US/09/732,436A   TIME: 15:39:05

Input Set : **A:\Cura-611.app**
Output Set: **N:\CRF3\09132001\I732436A.raw**

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 4        Shimkets, Richard
 6 <120> TITLE OF INVENTION: NOVEL INTERFERON OMEGA AND NUCLEIC ACIDS ENCODING SAME
 8 <130> FILE REFERENCE: 15966-615
10 <140> CURRENT APPLICATION NUMBER: 09/732,436A
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C--> **11 <141> CURRENT FILING DATE: 1999-07-12**
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13 <150> PRIOR APPLICATION NUMBER: 60/169,887
14 <151> PRIOR FILING DATE: 1999-12-09
16 <150> PRIOR APPLICATION NUMBER: 60/170,230
17 <151> PRIOR FILING DATE: 1999-12-10
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Does Not Comply
Corrected Diskette Needed

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21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 475
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
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40             35                  40                  45
42 Cys Thr Ala Thr Thr Cys Cys Cys Thr Thr Thr Cys Thr Gly Cys
43         50                  55                  60
45 Gly Ala Cys Cys Thr Gly Cys Cys Thr Ala Ala Ala Gly Cys Thr Cys
46  65                  70                  75                  80
48 Ala Gly Gly Thr Gly Ala Thr Thr Thr Cys Thr Gly Cys Cys Cys Thr
49                 85                  90                  95
51 Cys Cys Ala Thr Ala Ala Gly Ala Thr Gly Cys Ala Cys Cys Ala Gly
52                 100                 105                 110
54 Cys Ala Gly Ala Thr Cys Thr Thr Cys Ala Gly Cys Cys Thr Cys Thr
55             115                 120                 125
57 Thr Thr Thr Thr Ala Cys Ala Cys Ala Ala Gly Gly Gly Cys Thr Thr
58      130                 135                 140
60 Gly Thr Cys Thr Gly Ala Thr Gly Cys Thr Thr Gly Gly Ala Ala Thr
61 145                 150                 155                 160
63 Ala Gly Gly Gly Cys Cys Thr Thr Cys Cys Thr Gly Gly Ala Cys Ala
64             165                 170                 175
66 Ala Ala Cys Thr Cys Cys Ala Gly Ala Cys Thr Gly Gly Ala Thr Thr
67          180                 185                 190
69 Thr Cys Ala Thr Cys Ala Gly Cys Ala Gly Cys Thr Gly Gly Ala Ala
70          195                 200                 205
72 Gly Ala Cys Cys Thr Gly Gly Ala Gly Ala Cys Cys Thr Gly Cys Thr
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RAW SEQUENCE LISTING   DATE: 09/13/2001
PATENT APPLICATION: US/09/732,436A   TIME: 15:39:05

Input Set : A:\Cura-611.app
Output Set: N:\CRF3\09132001\I732436A.raw

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82             260                 265                 270
84 Cys Thr Ala Cys Ala Cys Thr Gly Gly Cys Cys Ala Thr Ala Ala Ala
85         275                 280                 285
87 Gly Ala Gly Gly Thr Ala Cys Thr Thr Cys Cys Ala Gly Gly Gly Ala
88     290                 295                 300
90 Gly Thr Ala Cys Ala Thr Thr Thr Cys Thr Thr Cys Thr Thr Gly Ala
91 305                 310                 315                 320
93 Ala Ala Gly Ala Gly Ala Gly Gly Ala Ala Ala Thr Thr Cys Ala Gly
94     .           325                 330                 335
96 Gly Ala Ala Cys Thr Gly Thr Ala Cys Cys Thr Gly Gly Gly Ala Gly
97             340                 345                 350
99 Gly Thr Thr Gly Thr Cys Gly Thr Ala Ala Thr Gly Gly Thr Ala Ala
100         355                 360                 365
102 Ala Gly Gly Gly Ala Thr Thr Thr Thr Thr Cys Thr Thr Ala Ala Gly
103     370                 375                 380
105 Cys Ala Cys Ala Ala Ala Ala Cys Thr Thr Cys Ala Ala Gly Ala Ala
106 385                 390                 395                 400
108 Ala Ala Ala Gly Ala Gly Ala Ala Cys Ala Gly Ala Ala Gly Ala Ala
109             405                 410                 415
111 Ala Ala Gly Ala Gly Ala Ala Cys Thr Gly Cys Ala Ala Ala Ala Ala
112         420                 425                 430
114 Ala Ala Ala Thr Cys Thr Gly Gly Ala Ala Ala Ala Gly Gly Thr Ala
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130 <223> OTHER INFORMATION: Description of Artificial Sequence: Curagen clone
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137             20                 25                  30
139 Thr Gly Ala Thr Cys Thr Cys Cys Thr Gly Cys Cys Ala Cys Ala Thr
140         35                 40                  45
142 Cys Thr Ala Thr Thr Cys Cys Cys Thr Thr Thr Thr Cys Thr Gly Cys
143     50                 55                  60
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PATENT APPLICATION: US/09/732,436A   TIME: 15:39:05

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151 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
152            100                 105                 110
154 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
155        115                 120                 125
157 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
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160 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
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166 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
167        180                 185                 190
169 Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
170         195                 200                 205
172 Ala Ala Ala Gly Cys Thr Cys Ala Gly Gly Thr Gly Ala Thr Thr Thr
173     210                 215                 220
175 Cys Thr Gly Cys Cys Cys Thr Cys Cys Ala Thr Ala Ala Gly Ala Thr
176 225                 230                 235                 240
178 Gly Cys Ala Cys Cys Ala Gly Cys Ala Gly Ala Thr Cys Thr Thr Cys
179                 245                 250                 255
181 Ala Gly Cys Cys Thr Cys Thr Thr Thr Thr Thr Ala Cys Ala Cys Ala
182             260                 265                 270
184 Ala Gly Gly Gly Cys Thr Thr Gly Thr Cys Thr Gly Ala Thr Gly Cys
185         275                 280                 285
187 Thr Thr Gly Gly Ala Ala Thr Ala Gly Gly Gly Cys Cys Thr Thr Cys
188     290                 295                 300
190 Cys Thr Gly Gly Ala Cys Ala Ala Ala Cys Thr Cys Cys Ala Gly Ala
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193 Cys Thr Gly Gly Ala Thr Thr Thr Cys Ala Thr Cys Ala Gly Cys Ala
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196 Gly Cys Thr Gly Gly Ala Ala Gly Ala Cys Cys Thr Gly Gly Ala Gly
197         340                 345                 350
199 Ala Cys Cys Thr Gly Cys Thr Thr Thr Gly Gly Thr Ala Thr Ala Gly
200         355                 360                 365
202 Ala Gly Gly Ala Thr Gly Gly Gly Ala Ala Gly Cys Ala Ala Gly Ala
203     370                 375                 380
205 Gly Thr Cys Thr Gly Cys Cys Cys Thr Gly Gly Ala Ala Ala Thr Thr
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208 Gly Ala Gly Gly Gly Cys Cys Cys Thr Ala Cys Ala Cys Thr Gly Gly
209             405                 410                 415
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215         435                 440                 445
217 Thr Thr Cys Thr Thr Gly Ala Ala Ala Gly Ala Gly Ala Gly Gly Ala
218     450                 455                 460
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RAW SEQUENCE LISTING   DATE: 09/13/2001
PATENT APPLICATION: US/09/732,436A   TIME: 15:39:05

Input Set : A:\Cura-611.app
Output Set: N:\CRF3\09132001\I732436A.raw

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223 Cys Thr Gly Gly Gly Ala Gly Gly Thr Thr Gly Thr Cys Gly Thr Ala
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226 Ala Thr Gly Gly Thr Ala Ala Ala Gly Gly Gly Ala Thr Thr Thr Thr
227         500             505             510
229 Thr Cys Thr Thr Ala Ala Gly Cys Ala Cys Ala Ala Ala Ala Cys Thr
230         515             520             525
232 Thr Cys Ala Ala Gly Ala Ala Ala Ala Ala Gly Ala Gly Ala Ala Cys
233     530             535             540
235 Ala Gly Ala Ala Gly Ala Ala Ala Ala Gly Ala Gly Ala Ala Cys Thr
236 545             550             555             560
238 Gly Cys Ala Ala Ala Ala Ala Ala Ala Ala Thr Cys Thr Gly Gly Ala
239         565             570             575
241 Ala Ala Ala Gly Gly Thr Ala Ala Thr Cys Thr Ala Thr Thr Thr Ala
242         580             585             590
244 Gly Cys Ala Ala Gly Ala Ala Gly Ala Gly Thr Gly Ala Ala Ala Gly Cys
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263 ctaagcgtgc tgtgcccagg ggcaggcctc ctgttcgtgc caccctcgct ggaccgccgg 180
264 gcagccgagc tgcggctggc agacaacttc atcgcctccg tgcgccgccg cgacctggcc 240
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269 ctcgacctct cctacaacaa cctcgagcag ctgccctggg aggccctggg ccgcctgggc 540
270 aacgtcaaca cgttgggcct cgaccacaac ctgctggctt ctgtgcccgc cggcgctttt 600
271 tcccgcctgc acaagctggc ccggctggac atgacctcca accgcctgac cacaatccca 660
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284 tacaacagct cggctgatga catcctcgtc tacaggatga tcccggcgga gagccgctcg 1440
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286 gaggacagcg ccacggggct cacggccacg cggcctgtgg gctgcgcccg cttctccacc 1560
287 gaacctgcgc tgcggccatg cggggcgccg cacgctccct tcctgggcgg cacgatgatc 1620
288 atcgcgctgg gcggcgtcat cgtagcctcg gtactggtct tcatcttcgt gctgctaatg 1680
289 cgctacaagg tgcacggcgg ccagcccccc ggcaaggcca agattcccgc gcctgttagc 1740
290 agcgtttgct cccagaccaa cggcgccctg gccccacgc ccacgcccgc cccgcccgcc 1800
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298 <213> ORGANISM: Equus caballus
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307 Gly Ala Gly Ala Thr Gly Cys Thr Cys Cys Ala Gly Cys Ala Gly Ala
308          35                  40                  45
310 Thr Cys Thr Thr Cys Ala Gly Cys Cys Thr Cys Thr Thr Cys Cys Ala
311      50                  55                  60
313 Cys Ala Cys Ala Gly Ala Gly Cys Gly Cys Thr Cys Gly Thr Cys Thr
314  65                  70                  75                  80
316 Gly Cys Thr Gly Cys Cys Thr Gly Gly Ala Ala Cys Ala Cys Gly Ala
317              85                  90                  95
319 Cys Cys Cys Thr Cys Thr Gly Gly Ala Cys Gly Ala Ala Cys Thr
320          100                 105                 110
322 Cys Thr Gly Cys Ala Cys Gly Gly Gly Ala Cys Thr Cys Cys Thr Thr
323          115                 120                 125
325 Cys Gly Gly Cys Ala Gly Cys Thr Gly Gly Ala Ala Gly Ala Cys Cys
326      130                 135                 140
328 Thr Gly Gly Ala Cys Ala Cys Cys Thr Gly Thr Thr Thr Gly Gly Ala
329 145                 150                 155                 160
331 Gly Cys Ala Gly Gly Ala Gly Ala Thr Gly Gly Gly Ala Gly Ala Gly
332              165                 170                 175
334 Gly Ala Ala Gly Ala Ala Thr Cys Thr Gly Cys Cys Cys Thr Gly Gly
335          180                 185                 190
337 Gly Ala Ala Cys Thr Gly Thr Gly Cys Gly Cys Cys Cys Thr Ala Cys
338          195                 200                 205
340 Ala Cys Thr Gly Gly Cys Cys Gly Thr Gly Ala Ala Gly Ala Gly Gly
341      210                 215                 220
343 Thr Ala Cys Thr Thr Cys Cys Gly Gly Gly Gly Ala Thr Cys Cys
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see item 11 on Erra Summary Sheet

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VERIFICATION SUMMARY   DATE: 09/13/2001
PATENT APPLICATION: **US/09/732,436A**   TIME: 15:39:06

Input Set : **A:\Cura-611.app**
Output Set: **N:\CRF3\09132001\I732436A.raw**

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L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:626 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:626 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: